

ABSTRACT OF THE DISCLOSURE

The image data is processed into a background plane and a plurality of foreground planes. Holes are inserted into the background plane, in regions which are assigned to a foreground plane. The background plane is sub-sampled, and holes remaining in the sub-sampled image are filled with the average color of the non-zero sub-sampled pixels over pre-determined blocks such as JPEG blocks. If a block is entirely made of holes, the block is filled with a constant color that is propagated from the average color of a previous block. The resulting background plane is far smoother than the original image data and thus can be effectively sub-sampled and highly compressed without adverse deterioration in reconstructed image quality.